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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,131

06/20/2005

Kunio Imai

KKI-0106

6707

23353 7590 12/15/2008
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EXAMINER

MALEKZADEH, SEYED MASOUD

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

12/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/540,131	Applicant(s) IMAI, KUNIO	
	Examiner SEYED M. MALEKZADEH	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 1 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/20/2005 and 10/07/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of group I, claims 1-8, in the reply filed on 09/03/2008 is acknowledged. The traversal is on the ground that "all claims include common technical features of a pre-formation apparatus comprising a film feeder, a pre-formation section with upper and lower clamp members, a retractable section in which the device determines with the pitch and meandering detection sections if a film being processed is correctly aligned. Therefore, if the claim of group 1 is allowable, groups 2 and 3 would be rejoined and also are allowable."

This is not found persuasive because, as recited in the previous office action, the common technical features failed to provide contribution to the art as it was found to not define over the prior art a posteriori as evidenced by Imai (JP 2002-210815) in view of Takahiro et al. (JP 01-237110) in which Imai teaches all of the limitations except for the two dimensional detection system that is taught by Takahiro. Therefore, due to the lack of a common special technical feature, the three groups are subject to restriction.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, “a meandering prevention device” as claimed in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 1 is objected to because of the following informalities: claim recites “wherein the pre-forming molds (80, 89) includes” (see line 8) in which the phrase is not grammatically correct. It is suggested to modify “includes” to “include”. Appropriate correction is required.

Furthermore, claims 1 and 8 are objected to because line 17 of the claim 1 and line 3 of the claim 8 include reference character “68m” which is not enclosed within the parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

Claim Rejections - 35 USC § 112, 2nd Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "this second detection section as part of the film feeder" in the fifteenth line of the claim. There is insufficient antecedent

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basis for this limitation in the claim because prior to the cited limitation, the claim fails to clearly define "a second detection section" for the claim.

The term "generally" in claim 1 renders the claim indefinite. Because the term is not defined by the claim, and the specification does not provide a standard for ascertaining the scope of the generally, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Appropriate correction is required.

Claim 3 recites the limitation "the width of pitch (W)" in the fourth line of the claim. There is insufficient antecedent basis for this limitation in the claim because prior to the cited limitation, claims 1 and 3 fail to clearly define "a width of pitch (W)".

Claims 4 and 5 recite the limitation "its vertical position" in their second line. There is insufficient antecedent basis for this limitation in the claim because prior to the cited limitation, the claims fail to clearly define if "its" is referring to which element of the apparatus.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 - 8 are rejected under 35 U.S.C 103(a) as being unpatentable over Imai (JP 2002-210815) in view of Naito et al (JP 01-237110)

Imai (JP '815) teaches a pre-forming device in which the apparatus comprises a film supply apparatus (26) as a film feeder which twisted the painting film (4), a pre-forming section (F) for pre-forming process, a mold clamping device (11) including clamp members (11a) and (11b), a cover half (13) having a through hole, pre-shaping dies (80 and 89) as pre-forming molds movable to and away from the performing section for pre-forming the printed film (4) via the through hole, a movable heater (70) to be movable to and away from the pre-forming section (F) for heating the printed film sandwiched by the upper and lower clamp members to plasticize the painting film prior to the pre-formation, a film die punch (91) for punching the printed film (4) after the pre-formation, a phototube (29) as a pitch detecting section which faces the pre-forming section (F) within a pre-formation pitch (P) of the printed film in a film flow direction for detection of pitch mark of the painting film (4), a pair of

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rollers which support the printed film (4). (See abstract; paragraphs 24, 28, 35, 45-48, and 51-52)

Also, the prior art teaches the phototube (29) as the pitch detecting section detects the film mark which is displaced in a direction perpendicular to the film flow direction and independent from the performing molds (80, 89), and further, the phototube (29) is disposed at a center of the width of pitch (W) in such a way that at least its vertical position fixed with respect to the pair of rollers which support the printed film in the pre-forming section (F). (See figures 1-2 and 12-13)

Furthermore, the prior art teaches that the lower clamp member has a vertical position which is fixed with respect to the pair of rollers which support the printed film (4) in the pre-forming section (F) and the pitch detecting section being virtually fixed to the lower clamp member. Also, the upper clamp member is formed with a slit for housing the pitch detecting section.

Moreover, Imai (JP '815) discloses at the time of the clamping, the painting film (4) is positioned in a shaping horizontal center side (H), and it is desirable to align the position of the painting film (4) stretched between the feed roller (64) and the feed roller (65). (See paragraph [0047]) Also, the apparatus is capable of aligning the undersurface (89a) of the upper pre-forming mold (89) and the undersurface of the upper elastic body (98d) to the shaping horizontal center side (H), and to align the mold with the thickness of

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the spacer (79b), the spacer (88b), and the spacer (98b). (See paragraph [0055]) Therefore, the prior art teaches a meandering prevention device.

However, the prior art fails to teach a meandering detection section between the performing section (F) and the pair of rollers (64, 65) which controls the meandering prevention device.

In the analogous art, Naito et al. (JP 01-237110) teach a press form apparatus for opening and closing a press roll when a transfer film (51) is moved in the longitudinal direction of the apparatus in which the apparatus comprises a press roll (54), a looseness-taking roller (55), and a longitudinal direction sensor (92) as a meandering detection section which detects a direction mark (58) printed on a transfer film (51), wherein a width direction sensor (93) detects a width direction mark (59) printed on a transfer film (51) to stop a width direction drive unit and position the transfer film (51) in the width direction. Therefore, transfer printing film is drawn out of a supply roll by driving feed rolls and is wound up on a wind-up roll through a movable mould. The longitudinal marks printed on the transfer printing film are detected by the longitudinal direction sensor (92) fixed to the movable mould so that the drive of the feed rolls are stopped to locate the transfer printing film. Further, the transfer printing film is moved along its width by moving a frame and is located in the same way. Therefore, the prior art teaches the meandering detection sections are along a film flowing direction and the meandering detection

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sections are provided on two sides of the printed film with respect to the film flowing direction.

Therefore, it would have been obvious for one of ordinary skill in the art at the time of applicant's invention to modify the teachings of Imai (JP 2002-210815) through providing a meandering detection section between the pre-forming section and the pair of rollers which controls the meandering prevention device in order to suppress of the defects which occurs thorough heat deformation of the printed film and further to accurately control of the printed film in the width direction, as suggested by Naito et al. (JP '110)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Masoud Malekzadeh whose telephone number is 571-272-6215. The examiner can normally be reached on Monday – Friday at 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin, can be reached on (571) 272-1189. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. M. M./

Examiner, Art Unit 1791

/Steven P. Griffin/

Supervisory Patent Examiner, Art Unit 1791